

Division of Waste Management Solid Waste Section

UNIT	UNIT TYPE:										
Lined MSWLF		LCID		YW		Transfer		Compost		SLAS	COUNTY: GASTON
Closed MSWLF	X	HHW		White goods		Incin		T&P		FIRM	PERMIT NO.: 36-03
CDLF		Tire T&P / Collection		Tire Monofill		Industrial Landfill		DEMO		SDTF	FILE TYPE: COMPLIANCE

Date of Site Inspection: <u>1/10/12</u> Date of Last Inspection: <u>Unknown</u>

FACILITY NAME AND ADDRESS:

Auten Road MSW (Closed) Monterrey Park Drive Ranlo, NC

GPS COORDINATES: N: 35.30451° E: - 81.13729°

FACILITY CONTACT NAME AND PHONE NUMBER:

Marcie Smith - Solid Waste & Recycling Administrator Phone (704) 922-0267

marcie.smith@co.gaston.nc.us

Fax: (704) 922-5890

FACILITY CONTACT ADDRESS:

Ray Maxwell - Gaston County Public Works Director P.O. Box 1578, Gastonia, NC 28053

PARTICIPANTS:

Bill Wagner, Environmental Senior Specialist - Solid Waste Section

STATUS OF PERMIT:

In-active: site closed.

Closure effective on July 24, 1996

SITE HISTORY and BACKGROUND:

MSWLF Facility Permit No. 36-03	Date	Document ID No. (DIN)
City of Gastonia begins landfill operations.	1959	N/A
Gaston Co. leases property and landfill operations from City of Gastonia.	July 1971	N/A
State issues Permit to Operate # 36-03.	June 1975	N/A
Landfill operations cease.	Jan 1987	N/A
Landfill Closed – Closure Letter Issued i.a.w. 15A NCAC 13B .0510 to Gaston County (Permit Holder)	July 24, 1996	15877

PURPOSE OF SITE VISIT:

Comprehensive Audit

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STATUS OF PAST NOTED VIOLATIONS:

N/A



Figure 1: Google Earth Aerial: Auten Rd. Closed MSW Landfill 36-03 (Groundwater monitoring well locations verified 1/10/12 in the field.)

OBSERVED VIOLATIONS

1. <u>Landfill Gas Monitoring</u>

15A NCAC 13B .1626(4)(b) which states in part "Owners or operators of all MSWLF units must implement a routine methane monitoring program."; and the rule goes on to state "The minimum frequency of monitoring shall be quarterly."

On November 8, 2001 Mark Poindexter (Solid Waste Section) sent a letter (enclosed) to Ray Maxwell (Gaston Co. Solid Waste Director) concerning the "Phase 1 Site Assessment Report for the Gaston County Auten Road, Biggerstaff and Cramerton Closed Sanitary Landfills (Permit #36-03,36-02, and 36-01)". Comments specific to the Cramerton Landfill included:

Item #5: "Quarterly landfill gas monitoring is required at all municipal waste sites. The Section shall be notified that a landfill gas monitoring system has been installed and is being monitored on a quarterly basis. Additionally, the Section shall be notified if there is an exceedance of the regulatory threshold. Please provide the Section confirmation that the above requirements are being fulfilled."

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Within 60-days of your receipt of this report, please develop a landfill gas monitoring plan and submit it for approval to:

Brian Wooten – Hydrogeologist Division of Waste Management – SWS Mail Service Center 1646 Raleigh, NC 27699-1646 919-707-8258

The suggested outline for a "Landfill Gas Monitoring Plan", is detailed in Section 8 of the enclosed "NCDENR Division of Waste Management, Solid Waste Section, Landfill Gas Monitoring Guidance, November 2010"

ADDITIONAL COMMENTS

1. Buffer Requirements

NCGS 15A NCAC 13B .0503(2)(f) requires that "a site shall meet the following buffer requirements: (i) A 50-foot minimum buffer between all property lines and disposal areas." The property lines and limits of waste have not been clearly delineated with permanent markers. While there are some edge-of-waste markers in place (2-inch PVC piping) these markers do not appear to match up with the site maps provided by Buxton Environmental, Inc.

No property line markers were observed. Using the Gaston County GIS, the parcel property lines were overlaid on an approximation of the locations of the landfill limits of waste. (Figure 1) Given that Figure 1 suggests that the edge of waste is very near, and in some cases crossing over the property lines, and there is insufficient documentation available to show that the required buffers are being maintained, permanent waste boundary markers, along with property line markers are needed. These markers should clearly and accurately delineate the limits of waste and the property lines. (See the attached May 29, 2009 Memo: "Permanent Edge-of-Waste Markers at Construction and Demolition Debris Landfills, Industrial Solid Waste Landfills and Municipal Solid Waste Landfills")

At this time, given the lack of conclusive documentation, these issues are not considered to be violations of the North Carolina solid waste rules.

Within 60-days of your receipt of this report, please determine and mark the limits of waste of the landfill; and determine and mark the property lines of the landfill in accordance with the enclosed May 29, 2009 Memo (Permanent Edge-of-Waste Markers at Construction and Demolition Debris Landfills, Industrial Solid Waste Landfills and Municipal Solid Waste Landfills").

Upon completion of the installation of the edge-of-waste and property line makers, please notify Bill Wagner the following address: NCDENR – Ashville Regional Office, 2090 US Hwy 70, Swannanoa, NC 28778.

2. Water Quality

a) Eight of the nine groundwater monitoring wells were located and inspected. Locational data (latitude and longitude) for each groundwater monitoring well was determined. Well "TW-1" could not be found. (Table 1)

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Well ID	Latitude (N)	Longitude (E)	Comment
MW-1	35.30588°	-81.14480°	Needs new well tag & should be more clearly identified.
MW-2	35.30662°	-81.13628°	Needs new well tag & should be more clearly identified.
MW-3	35.30474°	-81.13501°	Needs new well tag & should be more clearly identified.
MW-4	35.30238°	-81.13501°	Needs new well tag & should be more clearly identified.
MW-5	35.30299°	-81.13894°	Needs new well tag & should be more clearly identified.
MW-5A	35.30299°	-81.13898°	Needs new well tag & should be more clearly identified.
TW-1	35.30317°	-81.14312°	Needs new well tag & should be more clearly identified.
TW-2	Unknown	Unknown	Could not locate this well.
TW-3	35.30378°	-81.14247°	This may also be known as well "MW-6"

Table 1: Groundwater Monitoring Well Locations & Condition

- b) Please ensure that each groundwater monitoring well is clearly marked with a unique ID and that site maps are updated to show the correct locations and IDs of each groundwater monitoring well.
- c) Water quality monitoring of nine groundwater monitoring wells (MW-1,2,3,4,5, 5A,6,TW-2,and TW-3) and two surface water locations ("upstream" and "downstream") is conducted semi-annually. A tenth well (TW-1) was not sampled because it was dry.
- d) Two surface water locations from were sampled: "Upstream" from Long Creek and "Downstream" from Burton Branch Creek.
- e) Results of the analysis of water quality samples that were collected on May 18, 2011 were reviewed.

3. Post Closure Maintenance:

- a) The cap of the landfill has a well established vegetative cover and is free of trees and woody vegetation.
- b) No seeps of leachate from the landfill, or excessive erosion of the cap or were observed.

4. <u>Landfill Gas Monitoring:</u>

- a) Annual landfill gas monitoring records were reviewed. The head-space of twelve groundwater monitoring wells were monitored on 3/11/10.
- b) Landfill gas monitoring is done annually by landfill staff.
- c) A review of the State's records did not find an approved landfill gas monitoring plan for the Auten Road Closed MSW landfill (36-03).
- d) According to the facilities records, each of the monitoring points are located at "least 100-ft. inside of the property line, without being on top of trash."
- e) At no time has a level of greater than 5% LEL for methane been detected at any sampling point.
- f) Historically, the site has been monitored annually for the possible presence of landfill gas. All results are reported in "% LEL for methane".
- g) Annual landfill gas monitoring has been done from 2006 to 2010.

5. Site Access

- a) Access from the end of Auten Road to the site is through a locked gate.
- b) Proper landfill signage is displayed at the Auten Road access gate.
- c) Uncontrolled access to the site can be made from the residence that border the southern side of the landfill and from the Duke Power lines right-of-way. (Figure 1)
- d) The perimeter access road around the landfill was muddy and impassable in several places at the time of the inspection. Please ensure that all access roads are maintained and are passable at all times.

The item(s) listed above were observed by Section staff and require action on behalf of the facility in order to come into or maintain compliance with the Statutes, Rules, and/or other regulatory requirements applicable to this facility. Be advised that pursuant to N.C.G.S. 130A-22, an administrative penalty of up to \$15,000 per day may be assessed for each violation of the Solid Waste Laws, Regulations, Conditions of a Permit, or Order under Article 9 of Chapter 130A of the N.C. General Statutes. Further, the facility and/or all responsible parties may be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

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CLOSURE HISTORY:

In a review of the Solid Waste Section files, the following five documents relating to the closure of the Auten Road Sanitary Landfill (36-01) were found.

1. May 5, 1995 Letter from Janis McHargue – Solid Waste Section, to Warren Shindle –Gaston County.

RE: "Clarification of the Regulatory Status of the Cramerton Landfill"

<u>Summary</u>: 1959 – The City of Gastonia begins operating the landfill. July 1971 – Gaston County leases the landfill property and its operation from the City of Gastonia. June 1975 – the State issues "Permit to Operate" # 36-03 for the landfill. January 1987 – The landfill stops receiving wastes and begins closure activities. June through October 1989 – Site study with 38 soil borings completed to confirm that the "final cover" requirements have been met. September 1989 – Landfill used as a disaster debris site for staging hurricane Hugo storm debris.

2. July 24, 1996 Letter from James Coffey – Solid Waste Section, to Warren Schindle [sic] – Gaston County RE: "Closure of the Auten Landfill Permit # 36-03"

<u>Summary</u>: Closure shall become effective upon written notification by Gaston County that the facility shall be maintained in compliance with the post closure conditions specified in the "Closure Letter" which states in-part: Management of landfill gas must meet the design standards in Rule .05023(2)(a); Management of surface water must meet the design standards in Rule .05023(2)(c); Surface water runoff must be controlled; Surface water shall not be impounded over waste; the integrity and effectiveness of the final cover system and any permanent erosion control devices must be maintained; Proposed post closure uses of the landfill must be reviewed and approved by the Section and such uses must not violate any post closure conditions; continuing solid waste management activities shall not violate any post closure conditions and must meet any other applicable requirements.

3. August 6, 1996 Letter from Warren Shindle – Gaston County, to James Coffey – Solid Waste Section RE: "Closure of the Auten Road Landfill, Permit #36-03"

<u>Summary</u>: Written notification from Gaston County to the Section that the facility shall be maintained in compliance with the post closure conditions specified in the "Closure Letter" dated July 24, 1996.

4. November 8, 2001 Letter from Mark Poindexter – Solid Waste Section, to Ray Maxwell – Gaston County RE: "Phase I Site Assessment Report for the Gaston County, Auten Road, Biggerstaff and Crammerton [sic] Closed Sanitary Landfills (Permit # 36-03,36-02, and 36-01)."

Auten Road Landfill Summary: There is confirmed contamination in MW-6 (an up-gradient well) that is located adjacent to a "stump dump"; Mr. Poindexter requested that Gaston County "notify the Section whether or not the "stump dump" is a waste unit regulated by the County"; Quarterly landfill gas monitoring is required at all municipal solid waste sites; The Section shall be notified when the landfill gas monitoring system has been installed and is being monitored on a quarterly basis and; Site surface water sampling locations shall be permanently marked in the field to help ensure consistency in sample collection.

5. May 29, 2009 Memorandum from the Solid Waste Section to Owners and Operators of Construction & Demolition Landfills, Industrial Landfills, and Municipal Solid Waste Landfills, to Landfill Owners and Operators.

RE: "Permanent Edge-of-Waste Markers at Construction and Demolition Debris Landfills, Industrial Solid Waste Landfills and Municipal Solid Waste Landfills"

<u>Summary</u>: Owners and operators of all active, inactive and closed C&D, Industrial and Municipal Solid Waste landfills must install and maintain permanent edge-of-waste markers for all landfill units; and Owners and operators of all active, inactive and closed C&D, Industrial and Municipal Solid Waste landfills must be able to show Division staff the permitted boundary of the facility.

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Please contact me if you have any questions or concerns regarding this inspection report.

Bill Wagner

Environmental Senior Specialist Regional Representative Phone: 828-296-4705

Sent on: 3/12/12	Email	Hand delivery	US Mail	X	Certified No. 7008 0150 0000 7473 5070
					To: Ray Maxwell, Gaston Co. Public Works Director

Enc: May 29, 2009 Memo: "Permanent Edge-of-Waste Markers at Construction and Demolition Debris Landfills, Industrial Solid Waste Landfills and Municipal Solid Waste Landfills"

"NCDENR Division of Waste Management, Solid Waste Section, Landfill Gas Monitoring Guidance, November 2010"

ec: Mark Poindexter, Field Operations Branch Supervisor – Solid Waste Section
Jason Watkins, District Supervisor – Solid Waste Section
Shawn McKee, Environmental Senior Specialist – Solid Waste Section
Brain Wooten, Hydrogeologist – Solid Waste Section
Marcie Smith - Solid Waste & Recycling Administrator (marcie.smith@co.gaston.nc.us)

c: Jan Winters, Gaston Co. Manager, P.O. Box 1578, Gastonia, NC 28053